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EXAMINER

TANG, KENNETH

ART UNIT PAPER NUMBER

2127

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/893,520

Applicant(s)

PELED ET AL.

Examiner

Kenneth Tang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/28/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-16 are presented for examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention:

- a. In claims 1 and 8, “command” (line 5) is indefinite because it is not made explicitly clear in the claim language what the “command” is doing to the shared resources.
- b. In claim 6, “creating reports” is indefinite because it is not made explicitly clear in the claim language what reports are of that’s being created. It is unclear whether these reports are of successful completion, data analysis, etc.
- c. In claim 7, “a critical part report” is indefinite because it is not made explicitly clear in the claim language whether this critical part report is the same as the “reports” in claim 6, or if a new and different report is being introduced.
- d. In claim 7, “another command or operation” is indefinite for the same reasons as stated in the rejection of claims 1 and 8 above.

e. In claim 8, “form reports” is indefinite because it is not made explicitly clear in the claim language what reports are of that’s being formed. It is unclear whether these reports are of successful completion, data analysis, etc.

f. In claim 9, “higher level processor” is indefinite because it is not made explicitly clear whether or not the higher level processor is related to a higher priority. Also, it is unclear what is considered a higher level processor versus a lower level processor. It is not made clear whether or not the command processors are considered lower level processors.

g. In claim 11, “non-critical commands” is indefinite because it is not made explicitly clear in the claim language what is considered non-critical commands. Also, it is unclear if this term is a command or whether it should be a subcommand.

h. In claim 12, “a critical part report” is indefinite because it is not made explicitly clear in the claim language whether this critical part report is the same as the “reports” in claim 8, or if a new and different report is being introduced.

i. In claim 12, “a particular command” is indefinite because it is not made explicitly clear in the claim language what the “particular command” is doing or what it is.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 6-8, and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stumer (US 2002/0064271 A1).

4. As to claim 1, Stumer teaches a method for utilizing shared resources (database) in a computerized system (optimization system includes a database and a database server), with the aid of a processor for processing commands to be executed using one or more of said shared resources, the method comprising steps of:

- deriving, from each of said commands, subcommands (subroutine) respectively related to said one or more shared resources (database) (*page 1, [0016], page 4, [0037]*),
- assigning priorities to said subcommands (subroutine) (*page 5, [0049]*),
- forwarding said subcommands to the respective one or more shared resources, so that each of said queues comprising the subcommands related to a particular shared resource (*page 4, [0037]*),

thereby ensuring execution of the subcommands by said shared resources in an asynchronous manner, and according to said subcommand priorities by each of the shared resources (*page 2, [0027], page 5, [0049]*).

Stumer teaches storing data such as priority and instructions (functions and subroutines) in a database (shared resource) and a memory register, but fails to explicitly teach that the database contain queues as the data structure. However, "Official Notice" is taken that both the concept and advantages of providing that storing with queues as a data structure is well known and expected in the art. It would have been obvious to one of ordinary skill in the art at the time the

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invention was made to include the database containing queues to the existing system in order to have a data structure that is able to contain (store) data.

5. As to claim 6, it is rejected for the same reasons as stated in the rejection of claim 1. In addition, Stumer teaches creating reports (monitoring and statistics unit) relating to said commands (*Abstract*).

6. As to claim 7, it is rejected for the same reasons as stated in the rejection of claims 1 and 6.

7. As to claim 8, it is rejected for the same reasons as stated in the rejection of claims 1 and 6.

8. As to claim 13, it is rejected for the same reasons as stated in the rejection of claim 8. In addition, Stumer teaches using memory buffers (*page 3, [0031] and [0034]*).

9. As to claim 14, it is rejected for the same reasons as stated in the rejection of claim 8. In addition, the priority is sorted as performing the higher priority first.

10. As to claim 15, it is rejected for the same reasons as stated in the rejection of claim 8. In addition, Stumer teaches controlling a telecommunication network (public telecommunication network/exchange) (*page 2, [0027]*).

11. As to claim 16, it is rejected for the same reasons as stated in the rejection of claim 8.

12. **Claims 2-5 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stumer (US 2002/0064271 A1) in view of Cota-Robles (US 2001/0056456 A1).**

13. As to claim 2, Stumer fails to explicitly teach assigning different command priorities to said commands, wherein the command priorities set an order of their urgency. However, Cota-Robles teaches priorities are typically assigned to programs according to the importance and/or urgency of the functions they perform on behalf of the computing system (page 1, [0004]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of assigning different command priorities to said commands, wherein the command priorities set an order of their urgency to the existing system because these priorities of urgency are used to determine when and for how long a program or a unit of executable code within the program is granted access to the processor and also optimizes the computer system's performance by, for example, minimizing response time to user input, maximizing throughput, and/or guaranteeing predictable execution times for application programs (*page 1, [0004]*).

14. As to claim 3, it is rejected for the same reasons as stated in the rejections of claims 1 and 2.

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15. As to claim 4, it is rejected for the same reasons as stated in the rejections of claims 1 and 2.

16. As to claim 5, Stumer teaches wherein the step of assigning priorities to the subcommands comprises assigning to each subcommand a combined priority, the combined priority being determined based on the subcommand's priority in the command and the priority of said command (*page 5, [0049]*).

17. As to claim 11, it is rejected for the same reasons as stated in the rejections of claim 4.

18. As to claim 12, it is rejected for the same reasons as stated in the rejections of claims 8 and 11.

19. **Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stumer (US 2002/0064271 A1) in view of Aucsmith et al. (hereinafter Aucsmith) (US 6,243,793 B1).**

20. As to claim 9, Stumer fails to explicitly teach teaches a higher level processor capable of cooperating with said command processors, said higher level processor being operative to distribute the commands between said command processors, and receive from said command processors reports to respective commands. However, Aucsmith teaches using a master processor that manages and coordinates the tasks/activities of various slave processors based on

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the order of priority (*col. 1, lines 25-36*). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the feature of a higher level processor capable of cooperating with said command processors, said higher level processor being operative to distribute the commands between said command processors, and receive from said command processors reports to respective commands to the existing system of Stumer because it would be beneficial to have a master processor as a manager to keep coordinate with, track and control the various processors beneath it (*col. 1, lines 25-36*).

21. As to claim 10, it is rejected for the same reasons as stated in the rejection of claim 9. In addition, the priority is sorted as performing the higher priority first.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Tang whose telephone number is (571) 272-3772. The examiner can normally be reached on 8:30AM - 6:00PM, Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kt
9/21/04



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